## SARDAR PATEL UNIVERSITY

## **Programme & Subject: B.sc (Instrumentation)**

**Semester: VI** 

Syllabus with Effect from: November/December - 2013

Paper Code: US06CINS01	Total Credit: 3
Title Of Paper: 8085 Microprocessor Architecture And Programming - II	10tal Cituit. 3

Unit	Description in detail	Weighting (%)
I	Example of an 8085 - Based Microcomputer: The 8085 Machine Cycles and	
	Bus Timings, Opcode Fetch Machine Cycle, Memory Read Machine Cycle,	25%
	Basic Interfacing Concepts: Peripheral I/O Instructions, I/O Execution,	2370
	Absolute Vs Partial Decoding	
II	Programming Techniques: Looping, Counting, and Indexing; Additional Data	
	Transfer and 16 - bit Arithmetic Instructions, Arithmetic Operations Related to	25%
	Memory	
III	Logic Operations: Rotate; Logic Operations: Compare, Counters and Time	
	Delays, Hexadecimal Counter, Modulo Ten Counter, Generating Pulse	25%
	Waveforms	
IV	Stack, Subroutine, Restart, Conditional Call, And Return Instructions, Bcd To	
	Binary Conversion, Binary To Bcd Conversion, Bcd To Seven - Segment Led	25%
	Code Conversion, Binary To Ascii And Ascii To Binary Conversion	

## **Basic Text & Reference Books:-**

- > Microprocessor Architecture, Programming, and Application by Ramesh. S. Gaonkar
- Understanding 8085/8086 Microprocessor and Peripheral ICs Through Questions and Answers By S. K. Sen
- ➤ Microprocessor (8085) by B. Ram

